CASSETTE CAR STEREO
WITH FM/AM ELECTRONIC TUNER

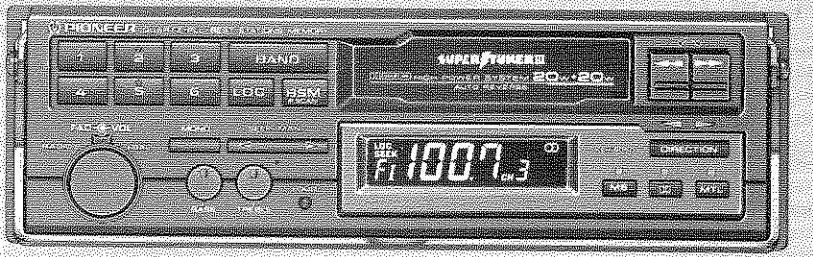
LECTEUR DE CASSETTE STEREO POUR
VOITURE AVEC SYNTONISEUR
ELECTRONIQUE FM/AM

SUPER TUNER III

OWNER'S MANUAL
MODE D'EMPLOI

Thank you for purchasing this PIONEER product. Before attempting operation, be sure to read this manual.
See reverse side of the package box for instruction of installation.

Nous vous remercions d'avoir acheté cet appareil PIONEER. Avant de l'utiliser, prendre soin de lire ce manuel.
Voir les instructions d'installation au dos du carton d'emballage.



PIONEER

KEH-6050R

Features

• Electronic Tuner

Frequency allocation differs depending upon the area. This unit has been designed in accordance with the frequency allocations for North, Central and South America. Use in other areas will result in improper reception.

Important

The serial number of this device is located on the bottom of the unit. For your own security and convenience, be sure to record this number on the enclosed warranty card.

- Built-in highly sensitive "Super Tuner III" for automatic control of stereo separation, muting and frequency characteristics to match the strength of the FM signal.
- The Best Stations Memory automatically memorizes the six best (strongest) stations in the six preset buttons in the order of their strength.
- Preset scan tuning for sequential recall of preset frequencies.
- Music search function allows automatic playback from the beginning of the selection being played or the beginning of the next selection.
- Built-in Dolby NR for reduced tape hiss.
- "Key-off pinch roller release" function automatically releases the pinch roller when the vehicle's ignition is switched off.
- The "Quick Release Mounting Bracket", facilitates mounting and dismounting of the car stereo and serves to protect the unit from theft.
- 20 W + 20 W maximum output for sound with power to spare. Combination with separately available power amp unit allows configuration of a powerful 4-speaker system.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

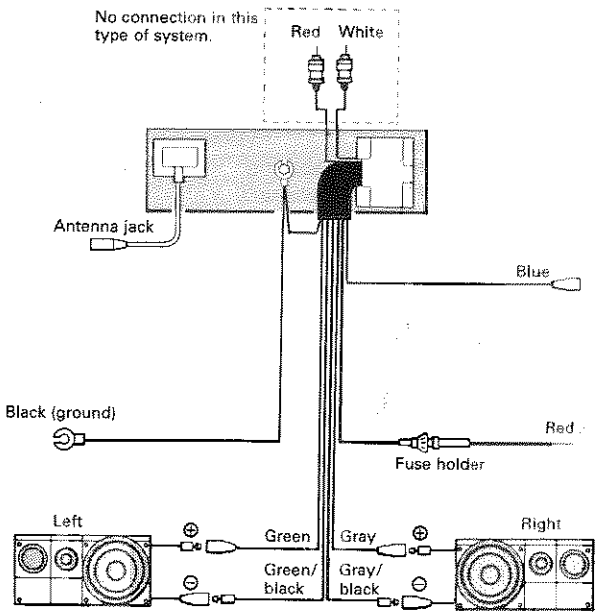
Connections

Note:

- To avoid shorts in the electrical system, be sure to disconnect the battery ⊖ cable before beginning installation.
- Replace fuses only with the types stipulated on the fuse holder.
- Be sure to properly connect the color coded leads. Failure to do so can cause malfunctions.
- Since a unique BPTL circuit is employed, never wire so the speaker leads are directly grounded or the left and right speaker ⊖ leads are common.
- Speakers connected to this unit must be high-power type possessing maximum input of at least 20 W and impedance of 4 to 8 ohms. Connecting speakers with output and/or impedance values other than those noted here can damage the speakers.

Black (ground)	To vehicle (metal) body.
Blue	System control/Auto-antenna relay control terminal (Max. 300 mA 12 V DC).
Red	To electric terminal controlled by ignition switch (12 V DC) ON/OFF.

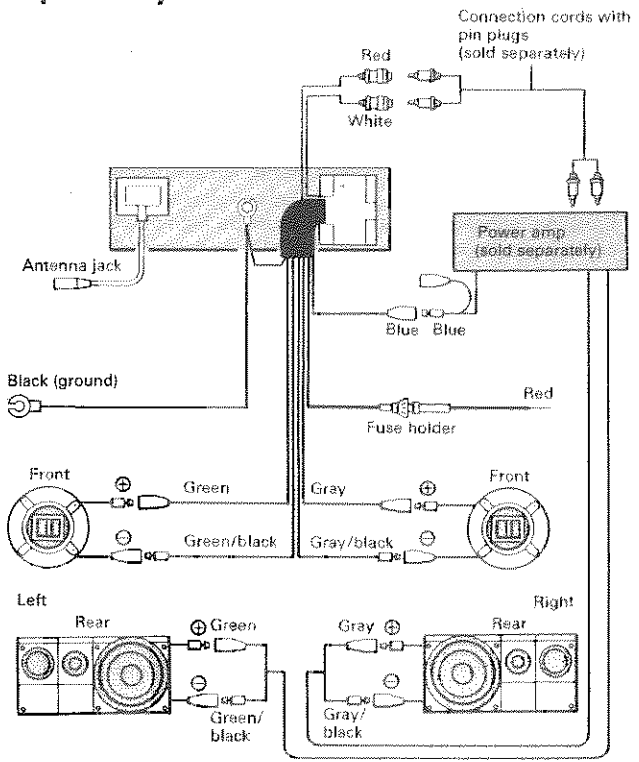
2-speaker system



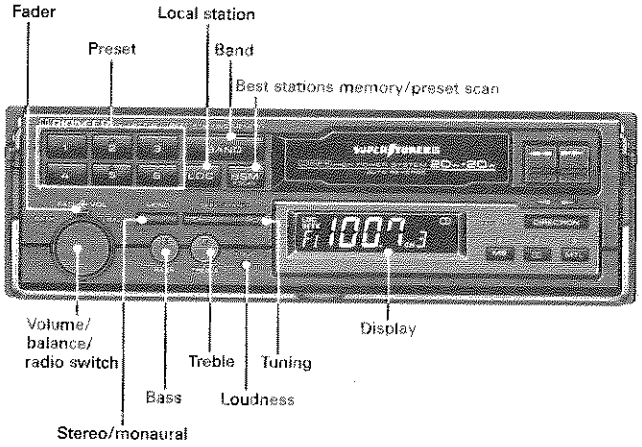
- See the respective power amp owner's manual for detailed wiring (power supply, etc.) information.

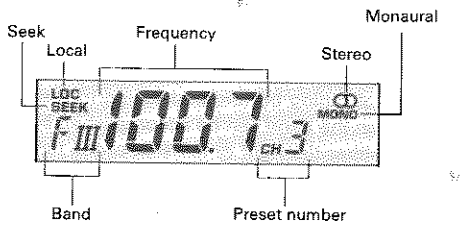
Black (ground)	To vehicle (metal) body.
Blue	System control/Auto-antenna relay control terminal (Max. 300 mA 12 V DC).
Red	To electric terminal controlled by ignition switch (12 V DC) ON/OFF.

4-speaker system



Using the Radio





- **Before attempting operation...**
- Reduce the volume by turning the volume control knob to the left.
- Set the fader control to the upright position.

1. Press the radio switch to turn on power and display the frequency.
2. Press the band switch to select the band.
3. Press both ends of tuning button and the seek tuning indicator will appear on the display.
4. Press either the left or right side of the tuning button to tune in the desired frequency. (Pressing the right side will increase the frequency.)
5. Adjust the volume and balance. Pull the knob out to adjust the balance.
6. Adjust the tone. Press the knob so that it is extended in order to make the adjustment, after setting to the desired level, push the knob in again to its original position.

- **To enter a frequency into the preset memory...**

7. Hold down one of the preset buttons (1-6) for approximately two seconds. The frequency is stored in memory (assigned to the preset button pressed) once the preset number stops flashing on the display.
   Six FM1 frequencies, six FM2 frequencies, six FM3 frequencies and six AM frequencies can be entered.

● Best Stations Memory Button

Automatically tunes strong frequencies and assigns them to preset buttons 1 through 6 for one-touch automatic tuning. The best stations memory function is activated by pressing this button for approximately 2 seconds. The best stations memory function is indicated by —— flashing on the display, and this function can be canceled by pressing the band switch. The frequency display returns once the best stations memory function is complete. The frequency displayed at this time is of the strongest station assigned to preset button 1 by the best stations memory function.

- 6 best (strongest) frequencies are memorized in the 6 preset buttons in the order of their strength, the strongest one being assigned to preset button 1.
- The frequencies previously assigned to the preset buttons are retained when 6 frequencies cannot be located.
- The best stations memory is in operation while —— is flashing on the display.

● Stereo/Monaural Switch

This switch is used to change from stereo to monaural for FM broadcasts, and is usually left in the stereo position. When a stereo broadcast is received, the stereo indicator will illuminate. With the "Super Tuner Ⅲ" function, stereo broadcasts can always be enjoyed in their optimal reception mode. If excessive noise is present, pressing this switch allows monaural reception of the broadcast.

● Local Station Switch

Pressing this switch increases the seek threshold level so that only relatively strong stations can be tuned in (local indicator will illuminate on the display). Local seek threshold level can be selected among four levels for FM and two levels for AM.

Holding this switch down for approximately 2 seconds and then pressing the right side of the tuning button changes the display form L-1, L-2, L-3 to L-4. Pressing the left side of the tuning button changes the display from L-4, L-3, L-2 to L-1 (L-1 and L-2 for AM). The bigger the number, the higher the seek threshold becomes and only relatively strong stations can be tuned in.

● Fader Control

This control is used to adjust the balance between the front and rear speakers when using a 4-speaker system. Turning the control to the right decreases the volume of the rear speakers, while turning it to the left decreases the volume of the front speakers. With 2-speaker systems, set this control to the upright position.

● Loudness Switch

When playing back a tape or listening to the radio at low volume, the low and high tones are emphasized and more clearly heard by pressing this switch.

Seek Tuning

Press both ends of tuning button, and tuning to the next higher or lower broadcast on the band can be accomplished automatically by simply pressing either the right or left side of the tuning button. FM frequencies change in 0.2 MHz steps while those in the AM band change in 10 kHz steps.

Preset Scan Tuning

Pressing the preset scan button (CH indicator flashes) causes previously stored frequencies to be tuned in sequentially for eight seconds each. Press again when the desired frequency is tuned in to cancel preset scan tuning.

Preset Tuning

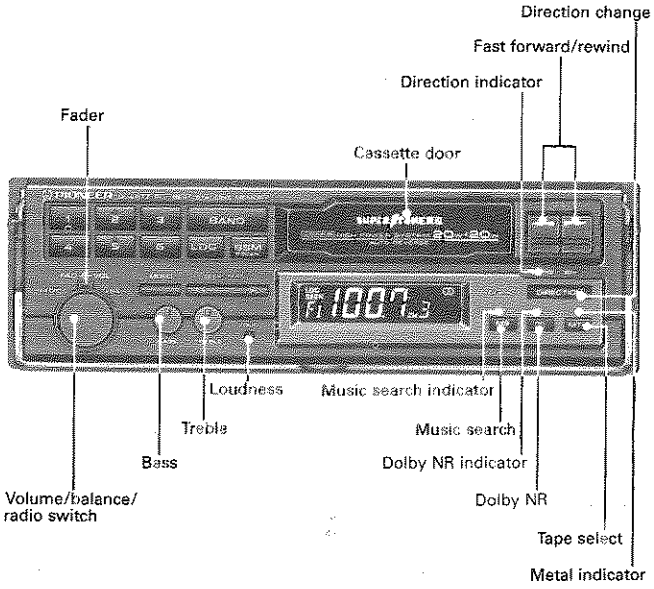
Pressing the preset button instantly tunes in the frequency programmed in the memory for that button.

Manual Tuning

When manual tuning is employed, FM frequencies change in 0.2 MHz steps, while AM frequencies change in 10 kHz steps.

1. Press both ends of tuning button, and the seek tuning indicator will disappear from the display.
2. Change the frequency by pressing either the left or right side of the tuning button. Pressing the button once will change the frequency one step (see above). Continuously depressing either side of the button will successively change the frequency at the prescribed step.

Using the Tape Deck



● Before attempting operation...

- Reduce the volume by turning the volume control knob to the left.
- Set the fader control to the upright position.

1. Insert a tape into the deck to turn the power on and automatically begin playback. Even if the radio is on, the unit will automatically switch to and begin tape playback.
2. Adjust the volume and balance. Pull the knob out to adjust the balance.
3. Adjust the tone. Press the knob so that it is extended in order to make the adjustment. after setting to the desired level, push the knob in again to its original position.
4. When tape playback reaches the end of the tape, playback will automatically switch from the side being played to the opposite side (ie. Side A to Side B or vice versa) (Auto-reverse). To eject the tape during playback, simultaneously press the fast forward and rewind buttons.

- A loose or warped label on a cassette tape may interfere with the eject mechanism of the unit or cause the cassette to become jammed in the unit. Avoid using such tapes or remove such labels from the cassette before attempting use.
- Do not try to eject the cassette immediately after insertion, as it will cause malfunction. Wait a few seconds.

● Fast Forward/Rewind

Since the transport can be in either direction, both the left and right high-speed tape transport buttons can be regarded as fast forward/rewind buttons.

For fast forward, press the high-speed tape transport button that corresponds to the direction that is shown by the direction indicator. When the end of the tape is reached, playback will automatically begin from the opposite side of the tape (Auto-reverse).

For rewind, press the button that is opposite that of the direction shown by the direction indicator. When the end of the tape is reached, playback will automatically begin from the beginning of the same side of the tape (Auto-replay).

Fast forward and rewind can be terminated by pressing the respective opposite high-speed tape transport button.

● Direction Change Button

This button is used to switch from one side of the tape to the other (from Side A to Side B or vice versa).

● Tape Select Switch

This switch is used to switch to the proper mode for the tape being used and should be depressed when using chrome or metal tapes.

● Dolby NR Switch

Press when playing a tape recorded with Dolby NR.

Music Search

The music search function is convenient for automatic playback from the beginning of the selection being played or the beginning of the next selection.

● Returning to the beginning of selection A

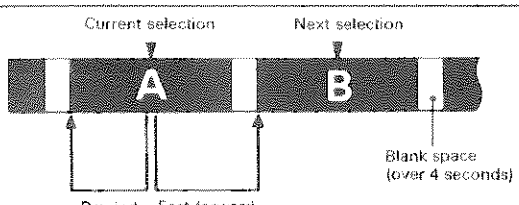
Press the music search button and then the high-speed tape transport button for the direction opposite that shown by the direction indicator. Playback will automatically start from the beginning of selection A.

● Moving from selection A to selection B

Press the music search button and then the high-speed tape transport button that corresponds to the direction shown by the direction indicator. Playback will automatically start from the beginning of selection B.

To enable regular fast forward/rewind operations, press the music search button again to turn the function OFF. The following errors will cause the music search function to operate improperly, even though the unit is not malfunctioning.

- Unrecorded "blank" portions between selections is less than seconds → the blank portion cannot be detected by the unit.
- Pauses in recorded conversations are longer than seconds → the unit reads these as blanks between selections.
- Portions are recorded at very low volume for more than seconds → the unit reads these as blanks between selections.



Care and Maintenance

- Do not use tapes longer than C-90-type (90 min.) cassettes. Longer tapes can interfere with tape transport.
- If the playback head becomes dirty, sound quality will suffer. Periodically (once or twice a month) clean the heads with a cotton swab soaked with alcohol. (Fig. 1)
- Storing cassettes in areas directly exposed to sunlight or high temperatures can distort them and subsequently interfere with tape transport. (Fig. 2)
- Store unused tapes in a tape case where there is no danger of them becoming loose or being exposed to dust.

• After Service

In the event this unit does not function properly, contact your dealer or the nearest authorized PIONEER Service Center.

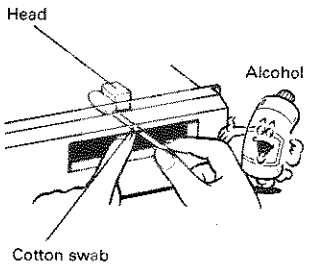


Fig. 1

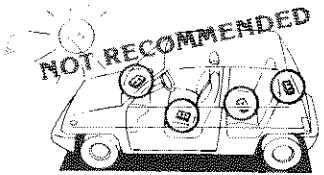


Fig. 2

Specifications

General

Power source	14.4 V DC (10.8 – 15.6 V allowable)
Grounding system	Negative type
Max. current consumption	4.7 A
Dimensions (chassis)	178(W) × 50(H) × 150(D) mm [7 (W) × 2 (H) × 5-7/8 (D) in.]
(nose)	188(W) × 58(H) × 10(D) mm [7-3/8 (W) × 2-1/4 (H) × 3/8 (D) in.]
Weight	1.4 kg (3.1 lbs.)

Amplifier

Continuous power output is 10 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.

Maximum power output	20 W + 20 W (EIAJ)
Load impedance	4 Ω (4 – 8 Ω allowable)
Preout output level/impedance	500 mV/1 kΩ
Tone controls (bass)	±10 dB (100 Hz)
(treble)	±10 dB (10 kHz)
Loudness contour	+12 dB (100 Hz), +7 dB (10 kHz) (volume: –30 dB)

Tape player

Tape	Compact cassette tape (C-30 – C-90)
Tape speed	4.8 cm/sec.
Fast forward/rewind time	Approx. 100 sec. for C-60
Wow & flutter	0.13% (WRMS)
Frequency response	Metal: 50 – 17,000 Hz (±3 dB) Normal: 50 – 14,000 Hz (±3 dB)
Stereo separation	45 dB
Signal-to-noise ratio	Dolby NR IN: 60 dB (IHF-A network) Dolby NR OUT: 52 dB (IHF-A network)

FM tuner

Frequency range	87.9 – 107.9 MHz (200 kHz)
Usable sensitivity	12 dBf (1.1 μV/75 Ω, mono)
50 dB quieting sensitivity	17 dBf (1.9 μV/75 Ω, mono)
Signal-to-noise ratio	70 dB (IHF-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	50 – 15,000 Hz (±3 dB)
Stereo separation	40 dB (at 65 dBf, 1 kHz)
Selectivity	70 dB (2ACA) (±400 kHz)

AM tuner

Frequency range	530 – 1,620 kHz (10 kHz)
Usable sensitivity	18 μV (25 dB) (S/N: 20 dB)
Selectivity	50 dB (±10 kHz)

These specifications were determined and are presented in accordance with specification standards established by the Ad Hoc Committee of Car Stereo Manufacturers.

Note:
Specifications and the design are subject to possible modification without notice due to improvements.

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